

#4

SEQUENCE LISTING



(1) GENERAL INFORMATION

(i) APPLICANT: Feldhaus, Andrew

(ii) TITLE OF THE INVENTION: TRANSCRIPTIONALLY-ACTIVATED
AAV INVERTED TERMINAL REPEATS (ITRs) FOR USE WITH RECOMBINANT
AAV VECTORS

(iii) NUMBER OF SEQUENCES: 21

(iv) CORRESPONDENCE ADDRESS:

- (A) ADDRESSEE: MORRISON & FOERSTER
- (B) STREET: 755 PAGE MILL ROAD
- (C) CITY: PALO ALTO
- (D) STATE: CA
- (E) COUNTRY: USA
- (F) ZIP: 94304-1018

(v) COMPUTER READABLE FORM:

- (A) MEDIUM TYPE: Diskette
- (B) COMPUTER: IBM Compatible
- (C) OPERATING SYSTEM: DOS
- (D) SOFTWARE: FastSEQ for Windows Version 2.0

(vi) CURRENT APPLICATION DATA:

- (A) APPLICATION NUMBER: 09/909,363
- (B) FILING DATE: 19-JUL-2001
- (C) CLASSIFICATION:

(vii) PRIOR APPLICATION DATA:

- (A) APPLICATION NUMBER: 09/171,759
- (B) FILING DATE: 20-OCT-1998

(viii) PRIOR APPLICATION DATA:

- (A) APPLICATION NUMBER: PCT/US98/21937
- (B) FILING DATE: 20-OCT-1998

(ix) PRIOR APPLICATION DATA:

- (A) APPLICATION NUMBER: 08/955,400
- (B) FILING DATE: 27-OCT-1997

(x) PRIOR APPLICATION DATA:

- (A) APPLICATION NUMBER: 60/108,162
- (B) FILING DATE: 21-OCT-1997

(xi) ATTORNEY/AGENT INFORMATION:

- (A) NAME: Polizzi, Caterhine M.
- (B) REGISTRATION NUMBER: 40,130
- (C) REFERENCE/DOCKET NUMBER: 226272003802

(xii) TELECOMMUNICATION INFORMATION:

- (A) TELEPHONE: 650-813-5600
- (B) TELEFAX: 650-494-0792
- (C) TELEX: 706141

(2) INFORMATION FOR SEQ ID NO:1:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 40 base pairs

- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

TCGAGTATAT AAGCAGAGCT CGTTAGTGA ACCGTCAGAG

40

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 40 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

TCGACTCTGA CGGTTCACTA AACGAGCTCT GCTTATATAC

40

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

TCGAGTTCTC CCTCTTCCCC TTTAATTCCA CCTTAAAACA TCTGCAAAAC

50

(2) INFORMATION FOR SEQ ID NO:4:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 50 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

TCGAGTTTG CAGATGTTT AAGGTGGAAT TAAAGGGAA GAGGGAGAAC

50

(2) INFORMATION FOR SEQ ID NO:5:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:5:

TCGAGTGCAC GCTCACGCAG GTTGCTATAT AAGCAGAGCT CGTTAGTGA ACCGTCAGAG

60

(2) INFORMATION FOR SEQ ID NO:6:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 60 base pairs
- (B) TYPE: nucleic acid

- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:6:

TCGACTCTGA CGGTTCACTA AACGAGCTCT GCTTATATAG CAACCTGCGT GAGCGTGCAC 60

(2) INFORMATION FOR SEQ ID NO:7:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 67 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:7:

TCGAGGCGCC GCTAGGGGTC TCTCTCGGGT GCTATATAAG CAGAGCTCGT TTAGTGAACC 60
GTCAGAG 67

(2) INFORMATION FOR SEQ ID NO:8:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 67 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:8:

TCGACTCTGA CGGTTCACTA AACGAGCTCT GCTTATATAG CACCGAGAG AGACCCCTAG 60
CGGCGCC 67

(2) INFORMATION FOR SEQ ID NO:9:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 82 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:9:

TCGAGCCGCT AGGGGTCTCT CTCGGGTGTG GGCCGGATCA GCTGACTCGC TGAGCCCCGC 60
CGCCGCGCTC GGGCTCCGTC AG 82

(2) INFORMATION FOR SEQ ID NO:10:

- (i) SEQUENCE CHARACTERISTICS:
- (A) LENGTH: 82 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:10:

TCGACTGACG GAGCCCGAGC GCGGCGCGG GGCTCAGCGA GTCAGCTGAT CCGGCCACAA 60
CCCGAGAGAG ACCCCTAGCG GC 82

(2) INFORMATION FOR SEQ ID NO:11:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 82 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:11:

TCGAGAACGG TGACGTGCAC GCGTGGCGG AGCCATCACG CAGGTTGCTA TATAAGCAGA 60
GCTCGTTAG TGAACCGTCA GA 82

(2) INFORMATION FOR SEQ ID NO:12:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 83 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:12:

TCGACTCTGA CGGTTCACTA AACGAGCTCT GCTTATATAG CAACCTGCGT GATGGCTCCG 60
CCCACGCGTG CACGTCACCG TTC 83

(2) INFORMATION FOR SEQ ID NO:13:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:13:

TCGAGCTGGA GCCGGTGTCA GGTTGCTCCG GTAACGGTGA CGTGCACGCG TGGGCGGAGC 60
CATCACGCAG GTTGCTATAT AAGCAGAGCT CGTTTAGTGA ACCGTCAGAG 110

(2) INFORMATION FOR SEQ ID NO:14:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 110 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:14:

TCGACTCTGA CGGTTCACTA AACGAGCTCT GCTTATATAG CAACCTGAGT GATGGCTCCG 60
CCCACGCGTG CACGTCACCG TTACCGGAGC AACCTGACAC CGGCTCCAGC 110

(2) INFORMATION FOR SEQ ID NO:15:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 83 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:15:

TCGAGGCCAA TCAGCGTGC GCGTTCTTT TCTGGCTCGA GCGGCCCTA TATAAGCAGA 60

GCTCGTTAG TGAACCGTCA GAG

83

(2) INFORMATION FOR SEQ ID NO:16:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 83 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:16:

TCGACTCTGA CGGTTCACTA AACGAGCTCT GCTTATATAG GGGCCGCTCG AGCCAGAAAA
GGAACGGCGC ACGCTGATTG GCC

60
83

(2) INFORMATION FOR SEQ ID NO:17:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 88 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:17:

TCGAGCCCCA CCCCTGCC CACCCCTGC CCCACCCCT GCCCCACCCC CTGTATATAA
GCAGAGCTCG TTTAGTGAA CGTCAGAG

60
88

(2) INFORMATION FOR SEQ ID NO:18:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 88 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:18:

TCGACTCTGA CGGTTCACTA AACGAGCTCT GCTTATATAC AGGGGGTGGG GCAGGGGGTG
GGGCAGGGGG TGGGGCAGGG GGTGGGGC

60
88

(2) INFORMATION FOR SEQ ID NO:19:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:19:

GCCGAGCGGG

10

(2) INFORMATION FOR SEQ ID NO:20:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:20:

CCGAAAGTTG

10

(2) INFORMATION FOR SEQ ID NO:21:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 10 base pairs
- (B) TYPE: nucleic acid
- (C) STRANDEDNESS: single
- (D) TOPOLOGY: linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:21:

CCTTTTCTGG

10